CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. _____

AND

NPDES NO. CA0085162

FOR
GRIZZLY RANCH COMMUNITY SERVICES DISTRICT
WASTEWATER COLLECTION, TREATMENT, AND RECYCLING FACILITY
PLUMAS COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code Sections 13267 and 13383 and describes requirements for monitoring domestic wastewater, treated effluent, and receiving water. The Discharger shall not implement any changes to this MRP unless and until the Regional Board or Executive Officer approves the changes.

All samples shall be representative of the volume and nature of the discharge or material sampled. The time, date, and location of each sample shall be recorded on a chain of custody form for the sample. Regional Board staff shall approve specific sample station locations prior to implementation of sampling activities.

All water quality sampling and analyses shall be performed in accordance with the Monitoring and Reporting Requirements as outlined in the Standard Provisions of this Order. Water quality sample collection, storage, and analyses shall be performed according to 40 CFR Part 136, or other methods approved and specified by the Executive Officer. Analyses shall be performed by a laboratory approved for analyses by the State Department of Health Services (DHS), except when a certified laboratory is not reasonably available to the Discharger, in which case a non-certified laboratory operating in compliance with a Quality Assurance-Quality Control program approved by the Executive Officer may be used.

Field test instruments (such as those used to test pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;

2. The instruments are calibrated in accordance with the manufacturers recommendations and the method has been accepted by Regional Board staff;

3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency, and;

4. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

PUMP VAULT AND GRINDER PUMP SYSTEM MONITORING

The grinder pump and storage vault at each individual home or business shall be accessible to the Discharger for the purpose of conducting inspections, recording pump run times, and making any necessary repairs. The Discharger is responsible for the operation and maintenance of the pumping vault and grinder pump, including alarm response. The Discharger shall annually report grinder pump run times for each home and estimate the annual wastewater flow from each home based upon the pump curve for the grinder pump. The Discharger shall annually report all maintenance and repairs performed on all vaults and grinder pumps.

INTERIM PLANT MAINTENANCE

Prior to the date the wastewater treatment plant is placed into service, the Discharger shall submit quarterly reports, detailing all maintenance that has been performed in accordance with Provision **11.a.8)** of the Order.

INFLUENT MONITORING

Samples shall be representative of the influent for the period sampled. The following shall constitute the influent monitoring program:

Constituent	Unit	Type of Sample	Sampling Frequency
Flow	Mgd	Meter	Continuous
BOD	mg/L, lbs/day	24-Hr. Composite	Weekly
Total Suspended Solids	mg/L, lbs/day	24-Hr. Composite	Weekly
Total Kjehldahl Nitrogen	mg/L, lbs/day	24-Hr. Composite	Quarterly
Nitrate	mg/L, lbs/day	24-Hr. Composite	Quarterly

WASTEWATER PUMPING AND HAULING MONITORING

The Discharger shall record the daily amount of wastewater pumped and hauled from the Plant headworks, and report this information monthly. Annually, the Discharger shall provide certification from the wastewater receiving facility or facilities of the amount of hauled wastewater. The Discharger shall notify the Regional Board when flow to the wastewater plant reaches 6,000 gallons per day, at which time, at the latest, the pumping and hauling of wastewater must cease and operation of the wastewater treatment plant must begin.

POND MONITORING

The Discharger shall record the following regarding the Irrigation Pond and the Emergency Pond:

Constituent	Unit	Type of Sample	Sampling Frequency
Liquid Depth and Freeboard	Feet	Visual	Monthly
Seepage through pond dikes	Presence/Absence	Visual	Monthly
Excessive odors or other nuisances	Presence/Absence	Observation	Monthly
Excessive weed growth in pond	Presence/Absence	Visual	Monthly

By **30 January of each year**, the Discharger shall submit the results of Emergency Pond liner testing.

By 15 October of each year the Discharger shall submit confirmation that the ponds have adequate capacity necessary to comply with Discharge Specification C.7.

EFFLUENT MONITORING

Effluent shall be analyzed as indicated below. The time of collection of grab samples shall be recorded.

Constituent	Unit	Type of Sample	Sampling Frequency
Chlorine (pre-dechlorination)	mg/L	Flow through	Continuous
Chlorine (post-dechlorination)	mg/L	Flow through	Continuous
pH	pH Units	Grab	Daily
Flow	mgd	Cumulative	Continuous
BOD	mg/L, lbs/day	24-hr. composite	Weekly
Total Suspended Solids	mg/L, lbs/day	24-hr. composite	Weekly
Temperature	°F	Grab	Weekly
Total Coliform[1]	MPN/100 mL	Grab	Daily (3 per week if there is no irrigation occurring)
Ammonia Nitrogen[2,3]	mg/L, lbs/day	24-hr. composite	Monthly
Nitrate Nitrogen	mg/L, lbs/day	24-hr. composite	Monthly
TKN	mg/L, lbs/day	24-hr. composite	Monthly
Electrical Conductivity	µmho/cm	24-hr. composite	Monthly[4]
Total Copper	mg/L	24-hr. composite	Monthly[4]
Total Lead	mg/L	24-hr. composite	Monthly[4]
Total Silver	mg/L	24-hr. composite	Monthly[4]
Dissolved Oxygen	mg/L	Grab	Monthly
Total Dissolved Solids	mg/L	24-hr. composite	Monthly[4]
Acute Bioassay[5]	% Survival	24-hr. composite	Twice per year[5]

Constituent	Unit	Type of Sample	Sampling Frequency
Total Phosphorus	mg/L	24-hr. composite	Annually
Oil and Grease	mg/L	24-hr. composite	Annually

[1]Samples for total coliform shall be obtained during the peak hourly flow for the day. If the coliform sample cannot be obtained during this time, the reason(s) for this inability shall be noted on the monthly monitoring report

[2]Concurrent with biotoxicity monitoring.

[3]Report as both total and un-ionized ammonia.

[4]Sampling frequency for these constituents may be decreased to twice per year after the first year of sampling if sampling indicates there is no reasonable potential to cause an exceedance of applicable water quality objectives. If the Discharger wishes to reduce the sampling frequency in accordance with this Monitoring and Reporting Program, they must submit a report to the Regional Board presenting their rationale regarding reasonable potential for these constituents.

[5]The acute bioassay samples shall be analyzed using EPA/821-R-02-12, Fifth Edition, or later amendment with Regional Board approval. Temperature and pH shall be recorded at the time of bioassay sample collection. Test species shall be salmonids, with no pH adjustment unless approved by the Executive Officer. Sample shall be taken concurrent with ammonia sampling. Acute bioassay samples shall be collected on the first day of discharge to Big Grizzly Creek and 90 days thereafter.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. Except in instances of noncompliance, the Discharger shall not be required to monitor and record data more often than twice the frequencies listed in this schedule. If the results of the acute bioassay show less than 70 percent survival, or the results of the three previous samples indicate a median survival of less than 90 percent, the Discharger shall immediately initiate an additional bioassay. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in this schedule.

RECYCLED WATER APPLICATION AREA MONITORING

Monthly, the Discharger shall report:

- The amount of recycled water pumped each day;
- Records of operational problems, plant and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventive action taken.
- Any employee training accomplished in accordance with the "Employee Training" program report required by Section 4.9 of the Guidelines of Title 22, and Provision **10.f** of the Order.

If there is no irrigation of the golf course during the month, that fact shall be noted on the Monitoring Report.

Process or equipment failures triggering an alarm shall be recorded and maintained as a separate record file at the wastewater treatment plant. The recorded information shall include the time and cause of failure and corrective action taken. It is not necessary to submit this information to the Regional Board, but it must be kept at the treatment plant for at least five years.

SLUDGE MONITORING

A composite sample of sludge shall be collected annually in accordance with USEPA's *POTW Sludge Sampling and Analysis Guidance Document, August 1989*, and tested for the following metals:

Cadmium	Lead
Chromium	Nickel
Copper	Zinc

Sampling records shall be retained for a minimum of five years. A log shall be kept of sludge quantities generated, and of handling and disposal activities. The frequency of entries is discretionary; however, the log should be complete enough to serve as a basis for part of the annual report.
The Discharger shall submit annually by **30 January**:

1. Annual sludge production in dry tons and percent solids.

2. A schematic diagram showing sludge-handling facilities and a solids flow diagram.

3. A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual sludge production disposed by each method.

    a. For **landfill disposal**, include: (1) the Board's waste discharge requirement Order numbers that regulate the landfill(s) used; (2) the present classifications of the landfill(s) used; and (3) the names and locations of the facilities receiving sludge.

    b. For **land application**, include: (1) the location of the site(s); (2) the Board's waste discharge requirement numbers that regulate the site(s); (3) the application rate in lbs/acre/year (specify wet or dry); and (4) subsequent uses of the land.

    c. For **other disposal methods**, include: (1) the location of the site(s); and (2) the Board's waste discharge requirement numbers that regulate the site(s).

WATER TREATMENT SYSTEM BACKWASH WATER MONITORING

During each backwash of the water treatment system, a grab sample of the backwash water initially discharged to the Irrigation Pond shall be obtained and analyzed for total arsenic.

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity to Big Grizzly Creek. The testing shall be conducted as specified in USEPA 821-R-02-013 or its most recent edition. Chronic toxicity samples shall be collected at the discharge of the chlorine contact basin following dechlorination. Samples shall be representative of the volume and quality of the discharge.

Time of collection of samples shall be recorded. The effluent tests must be conducted with concurrent reference toxicant tests. Monthly laboratory reference toxicant tests may be substituted upon approval. Both the reference toxicant and effluent test must meet all test acceptability criteria as specified in the USEPA chronic manual. If the test acceptability criteria are not achieved, then the Discharger must resample and retest within 14 days. If undiluted effluent exhibits toxicity, the Discharger shall sample during the next available discharge event and conduct the test using a dilution series bracketing the concentration of effluent in the receiving water. Dilution water shall be receiving water from Big Grizzly Creek taken upstream from the discharge point. Laboratory water may be used for dilution water if upstream water exhibits toxicity. Chronic toxicity monitoring shall include the following:

Species: Pimephales promelas, Ceriodaphnia dubia, and Selenastrum capricornutum

Frequency: Once within 180 days of adoption of this permit and once 365 days prior to the permit expiration.

RECEIVING WATER MONITORING

Receiving water monitoring shall be conducted when discharge to Big Grizzly Creek is occurring. All receiving water samples shall be grab samples. Receiving water samples shall be taken from the following:

Station	Description
R-1	100 feet upstream of the discharge
R-2	100 feet downstream of the discharge

Constituent	Unit	Station	Sampling Frequency
Receiving water Flow	cfs	R-1	Continuous
Dissolved Oxygen	mg/L	R-2	Weekly
Total and Fecal Coliform	MPN/100 mL	R-1, R-2	Weekly
pH	pH Units	R-1, R-2	Weekly
Turbidity	NTU	R-1, R-2	Weekly
Total Copper	mg/L	R-1, R-2	Quarterly[1]
Total Lead	mg/L	R-1, R-2	Quarterly[1]
Total Silver	mg/L	R-1, R-2	Quarterly[1]
Hardness	mg/L	R-1, R-2	Quarterly[1]
Temperature	°F	R-1, R-2	Quarterly[1]
Electrical Conductivity	µmho/cm	R-1, R-2	Quarterly[1]

[1] Sampling frequency for these constituents shall be reduced to annually if the first year of sampling shows no exceedances of water quality objectives.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions at the monitoring stations. Receiving water shall be inspected for the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life

Notes on receiving water conditions shall be summarized in the monitoring report.

PRIORITY POLLUTANT MONITORING

The State Implementation Policy (SIP) requires periodic testing for the toxic priority pollutants established by the CTR in 40 CFR 131.48

The Discharger shall conduct three sampling events for treatment plant effluent and one event for receiving water during the first year of effluent discharge to provide additional information on effluent priority pollutants and whether the discharge represents a reasonable potential for exceedance of water quality objectives.

The first sampling event shall be conducted **within 90 days of the initiation of discharge**. During this first sampling event, a 24 hour composite sample shall be collected from the effluent discharge and a grab sample upstream at Receiving Water Station R-1. The samples shall be analyzed for the pollutants identified in Attachment C. The second and third sampling events shall consist of 24-hour composite samples of effluent only. A fourth sampling event, including effluent and Big Grizzly Creek sampling, shall be conducted no later than 365 days prior to permit expiration. Analytical results shall be reported within **90 days of sample collection.**

Receiving water and effluent samples shall be collected simultaneously, and analyzed for the CTR pollutants (identified in Attachment C) plus pH and hardness. The Discharger is not required to perform asbestos monitoring. All analyses shall be performed at a laboratory certified by the California Department of Health Services. The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each of the analytes. Laboratory methods and limits shall be as described in the SIP, unless a variance has been approved by the Executive Officer. If, after a review of the monitoring results, it is determined that the discharge causes, has the reasonable potential to cause, or contributes to in-stream excursions above water quality objectives, this Order will be reopened and limitations based on those objectives will be included. Additionally, if pollutants are detected, but insufficient information exists to establish an effluent limit or determine if an effluent limit is necessary, then additional monitoring will be required to provide sufficient information. Results shall be reported within **90 days of sample collection.**

All organic analyses shall be by Gas Chromatography/Mass Spectrometry (GCMS), Method 8260B for volatiles and Method 8270C for semi-volatiles. Pesticides shall be analyzed by Method 8081A. Dioxins shall be analyzed by Method 1613/8290. If organic analyses are run by Gas Chromatography (GC) methods, any detectables are to be confirmed by GCMS.

Metals shall be analyzed by the USEPA methods listed below. Alternative analytical procedures may be used with approval by the Regional Board if the alternative method has the same or better detection level than the method listed.

{PRIVATE } **Method Description**	**EPA Method**	**Constituents**
Inductively Coupled Plasma/Mass Spectrometry (ICP/MS)	1638	Antimony, Beryllium, Cadmium, Copper, Lead, Nickel, Selenium, Silver, Thallium, Total Chromium, Zinc
Cold Vapor Atomic Absorption (CVAA)	1631	Mercury
Gaseous Hydride Atomic Absorption (HYDRIDE)	206.3	Arsenic
Flame Atomic Absorption (FAA)	218.4	Chromium VI
Colorimetric	335. 2 or 3	Cyanide

Analysis for the dioxin congeners shall be performed as described in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* using High Resolution Mass Spectrometry.

The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the U.S. EPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.

b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or – a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

d. Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

WATER SUPPLY MONITORING

The Discharger shall forward all testing (excluding bacteriological testing), performed on water supply wells that is required by the Department of Health Services.

REPORTING

Monitoring results shall be submitted to the Regional Board by the **1st day of the second month** following sample collection (e.g., the January report is due by 1 March). Quarterly and annual monitoring results shall be submitted by the **1st day of the second month** following each calendar quarter and year, respectively**. In accordance with Section 13385.1 of the Water Code, a failure to file a discharge monitoring report is subject to a $3,000 mandatory minimum penalty for each day subsequent to a period of 30 days following the deadline for submitting the report.**

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly the compliance with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **30 January** of each year, the Discharger shall submit a written report to the Executive Officer containing the following:

1. The names, certificate grades, and general responsibilities of all persons employed at the Plant (Standard Provision A.5).
2. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.
3. A statement certifying when flow meters and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).
4. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

The Discharger may also be requested to submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Board.

Ordered By: _____
THOMAS R. PINKOS
Executive Officer

_____
(Date)

RSD/sae
10/14/05